sues) of a pair of electric batteries in the region between the cranium and anterior extension of the pectoral fins. The family is divisible naturally into three sub-families which should be called Narcobatinæ, Narcininæ and Hypninæ. These sub-families are differentiated by modifications of the cranium and skeleton generally, disk, tail, position of spiracles and structure of teeth. The nomenclature involves a singular point. The name *Torpedo* was first applied (by Forskal in 1775) as a generic term to the electric catfish of the Nile subsequently called *Malapterurus*, and was accompanied by a tolerable generic diagnosis. (The full history and etymology of the word *Torpedo* was given.) Therefore *Torpedo* must be used for the Nematognath fish. The electric ray must consequently receive another name, and *Narcobatis*, of Blainville, is therefore available. The genera would then have the following names: *Narcobatinæ*, with Narcobatis and Tetranarce; *Narcininæ*, with Narcine, Discopyge, Narbe (Astrabe) and Temera; *Hypninæ*, with Hypnos.

Mr. L. O. Howard cited the name Tarantula as a similar case in which a generic name had long been misapplied. It was first given to a scorpion, and after long service as the name of a spider it has recently been restored to its original meaning. Dr. W. H. Dall and Dr. C. Hart Merriam both agreed that in all such cases the strict law of priority should govern.

Major J. W. Powell spoke on the Classification of the Subject-Matter of Biology and the paper was discussed at length.

FREDERIC A. LUCAS,
Secretary.

ACADEMY OF SCIENCE OF ST. LOUIS.

THE Academy held its regular meeting on April 15 with President Green in the Chair and twenty-nine members and visitors present.

Miss Mary E. Murtfeldt read a paper on 'Habits of Certain Seed Feeding Insects,' giving the result of her observations and experiments with insects which feed upon the seeds of weeds and other injurious plants. Some of these insects were new to science. Miss Murtfeldt stated as her conclusion that the seed feeding insects exercise a very pronounced effect in preventing the spread of weeds, and in many instances almost exterminate them.

A. W. DOUGLAS,
Recording Secretary.

SCIENTIFIC JOURNALS.

BOTANICAL GAZETTE, APRIL.

Issued April 20, 1895. 64 pp., 2 pl.

Present Problems in the Anatomy, Morphology and Biology of the Cactaceæ: W. F. GANONG.

This is the first installment of a paper (to be concluded in the May number) setting forth in brief statement what is at present known of this group in regard to the topics enumerated in the title, and the problems, mainly to be solved by careful field observation and a study of development, which still remain to be worked out.

Flowers and Insects, XIV.: CHARLES ROBERTSON.

In this paper and its predecessor (Bot. Gaz. **20**: 104, Mr. 1895) Mr. Robertson has somewhat changed his plan of contributions to the relations of flowers and insects, in now bringing together his information in regard to the several species of a genus, accompanying it with a voluminous bibliography. Species of Gentiana, Frasera, Phlox, Lithospermum, Physalis and Mimulus are discussed.

Notes From My Herbarium, II.: WALTER DEANE.

The herbarium of Mr. Deane is one of the finest private collections in this country in the excellence and completeness of the plants represented, viz., those of the range of Gray's Manual. It is specially rich in

its representation of life histories of plants so far as these can be shown by dried specimens. In this series of notes Mr. Deane is putting on record some of the information gained in the making of this collection. The fruit of *Nymphæa odorata* Ait., a case of teratology in *Apocynum androsæmifolium* L., and *Typha latifolia* L. are discussed in No. II.

Synopsis of North American Amaranthaceæ, II.: Edwin B. Uline and Wm. L. Bray.

This installment of the paper gives a systematic enumeration of the N. Am. species of the genera Acnida and Gomphrena. *Acnida tamariscina prostrata* and *Gomphrena Tuerckheimii* are described as new. To the latter *Telanthera Tuerckheimii* Vatke is probably to be referred.

A Reply to Dr. Robinson's Criticism of the 'List of Pteridophyta and Spermatophyta of Northeastern America:' Frederick V. Coville.

Among *Briefer Articles* Mr. J. Schneck describes and figures the flowering and fruiting of the spider-flower, *Cleome spinosa* L., a subtropical species which reaches up the Mississippi valley as far as S. Ills.; Mr. Geo. H. Shull records some observations on the branching, inflorescence and flowers of *Enslenia albida*, illustrated with a plate; Mr. F. H. Blodgett adds some points to a paper (Bot. Gaz. **19**: 61. F 1894) on the development of the bulb of the adder's tongue, *Erythronium Americanum* Ker.; Mr. Thomas Meehan gives a short biographical sketch of the late John H. Redfield of Philadelphia, and Professor W. W. Bailey does the same for the late Mr. George Hunt of Providence, R. I. In a note on the Systematic Botany of North America, Professor N. L. Britton, the chairman of the Board of Editors, gives a list of the parts at present assigned to the collaborators named.

The editorials deal with the discussion on nomenclature and the progress of the Systematic Botany of North America. In the department of Current Literature Sayre's *Materia Medica* (botanical part), Thomas and Dudley's *Manual of Histology*, and Lister's *Monograph of the Mycetozoa* are reviewed, with briefer mention of several other works. The number closes with six pages of notes and news regarding botanists, their doings and writings.

THE AMERICAN NATURALIST, APRIL.

On the Presence of Fluorine as a Test for the Fossilization of Animal Bones.

Experimental Evolution Amongst Plants: L. H. Bailey.

Observations on a so-called Petrified Man: J. M. Stedman.

On the Validity of the Genus Margaritana: Chas. T. Simpson.

Editor's Table; Recent Literature; Recent Books and Pamphlets; General Notes; Geography and Travels; Mineralogy; Petrography; Geology and Paleontology; Botany; Zoölogy; Entomology; Embryology; Psychology; Archeology and Ethnology; Microscopy.

Proceedings of Scientific Societies; Scientific News.

NEW BOOKS.

The Cambridge Natural History, Vol. III., Molluscs. A. H. Cooke. Brachiopods (recent), A. E. Shipley. Brachiopods (fossil), F. R. C. Reed. New York and London, Macmillan & Co. 1895. Pp. xi + 535. $2.60.

Elements of Mineralogy, Chrystallography and Blowpipe Analysis. Alfred J. Moses and Charles Lathrop Parsons. New York, D. Van Nostrand Company. 1895. Pp. vii + 342.

Steam Power and Mill Work. Geo. W. Sutcliffe. New York, Macmillan & Co. 1895. $4.50.

A Treatise on Bessel Functions. Andrew Gray and G. B. Matthews. New York, Macmillan & Co. 1895. $4.50.